

I Claim:

1. A semiconductor component, comprising:

a carrier plate;

a housing connected to said carrier plate and having a first side and a second side opposite said first side;

at least one ceramic substrate having a top side and a metallization layer disposed at least at said top side, said ceramic substrate supported by said carrier plate;

at least two switching elements disposed at said top side of said ceramic substrate and each having load current connections and a control connection, said two switching elements disposed next to one another;

a plurality of external load current connection elements disposed on said first side and said second side of said housing;

leads connecting said external load current connection elements electrically to said load current connections of said switching elements, said leads disposed substantially parallel to each other, and adjacent ones of said external load current connection elements each have an opposite polarity, so that

adjacent ones of said leads each carry opposite current directions;

first terminals for receiving a first supply potential and connected to some of said external load current connection elements;

second terminals for receiving a second supply potential and connected to others of said external load current connection elements not connected to said first terminals;

said two switching elements including a first switching element connected to a first of said external load current connection elements on said first side of said housing and said first external load current connection element connected to one of said first terminals, said first switching element further connected to a second of said external load current connection elements on said second side of said housing and said second external load current connection element connected to one of said second terminals; and

said two switching elements having a second switching element connected to a third of said external load current connection elements on said second side of said housing and said third external load current connection element connected to one of said first terminals, said second switching element further

connected to a fourth of said external load current connections on said first side of said housing and said fourth external load current connection element connected to one of said second terminals.

2. The semiconductor component according to claim 1, wherein said two switching elements are two of a plurality of even-numbered switching elements connected to said external load current connection elements on said first side and said second side such that said switching elements alternately have the first supply potential and then the second supply potential.

3. The semiconductor component according to claim 1, wherein each of said two switching elements contain two semiconductor switches connected in series at a junction point, said junction point is connected to one of said external load current connection elements and forms an output of the semiconductor component.

4. The semiconductor component according to claim 3, wherein said two semiconductor switches are disposed on an alignment line orthogonal to said first side and, respectively, said second side.

Abstract

using the semiconductor component recited in claim 1 for driving the 3-phase inverter module.